

1980; Mold., *Phytologia* 48: 176. 1981.

Dahlstrand encountered this plant along roadsides, at 1800 m. altitude, in flower and fruit in March.

Additional citations: ZIMBABWE: *Dahlstrand* 58 (Go).

LIPPIA WILMSII H. H. W. Pearson

Additional bibliography: Good & Exell, *Journ. Bot.* 68: Suppl. 2: 140. 1930; Mold., *Phytologia* 40: 202--204. 1978; Mold., *Phytol. Mem.* 2: 223, 227, 236, 238, 239, 241, 243, 246, & 563. 1980.

LIPPIA WILMSII var. *SCABERRIMA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 40: 204. 1978; Mold., *Phytol. Mem.* 2: 238, 239, 246, & 563. 1980.

LIPPIA WILMSII var. *VILLOSA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 40: 204. 1978; Mold., *Phytol. Mem.* 2: 220, 223, 224, 227, 231, 234, 236, 238, & 563. 1980.

LIPPIA WOODII Mold.

Additional bibliography: Mold., *Phytologia* 40: 204. 1978; Mold., *Phytol. Mem.* 2: 238, 239, 246, & 563. 1980.

LIPPIA YUCATANA Loes.

Additional bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 39 (2): 320. 1913; Fedde & Schust., *Justs Bot. Jahresber.* 40 (2): 335. 1915; Mold., *Phytologia* 40: 204--205. 1978; Hocking, *Excerpt. Bot. A.33*: 88. 1979; Mold., *Phytol. Mem.* 2: 65 & 563. 1980.

ADDITIONAL NOTES ON THE GENUS *CITHAREXYLUM*. XVIII

Harold N. Moldenke

CITHAREXYLUM B. Juss.

Additional & emended bibliography: Sandmark in L., *Amoen. Acad.* 5: 380. 1759; Loud., *Hort. Brit.*, ed. 1, 248 & 529 (1830) and ed. 2, 248 & 529. 1832; G. Don in Loud., *Hort. Brit.*, ed. 3, 248 & 529. 1839; G. Don in Sweet, *Hort. Brit.*, ed. 3, 551. 1839; Ulrich, *Internat. Wörterb.*, ed. 1, 56 (1871) and ed. 2, 56. 1875; Stahl, *Estud. Fl. Puerto Rico*, ed. 1, 3: 293. 1888; D. H. Scott in Solered., *Syst. Anat. Dicot.* [transl. Boodle & Fritsch] 2: 1021 & 1022. 1908; Urb., *Symb. Antil.* 4: 535. 1911; Firminger, *Man. Gard. India*, ed. 6, 2: 386. 1918; Stahl, *Estud. Fl. Puerto Rico*, ed. 2, 3: 293. 1937; Klein, *Sellowia* 31: 163. 1979; Olmsted, Loope, & Hilsenbeck, *So. Fla. Res. Cent. Rep. T.604*: 34 & 48. 1980; Wiggins, *Fl. Baja Calif.* 33, 525, 526, & 529, fig. 496. 1980; Mold., *Phytologia* 47: 359--360 & 504. 1981.

It is of passing interest to note that Reichenbach (1828) classified this genus (as also all the rest of the *Verbenaceae*) in the *Labiatae* [=Lamiaceae].

The *Garcia-Barriga & Jaramillo M. 19906*, distributed as *Citharexylum* sp. in some herbaria, actually is *Aegiphila bogotensis* (Spreng.) Mold.

CITHAREXYLUM BERLANDIERI B. L. Robinson

Additional bibliography: Mold., *Phytologia* 47: 224. 1980; Mold., *Phytol. Mem.* 2: 48, 60, 347, 381, & 530. 1980.

Flores regards this as an "endangered species", but probably only as regarding its occurrence in the United States.

Additional citations: TEXAS: Cameron Co.: *Flores 70* (Ne--93465). MEXICO: Nuevo León: *Hinton 17934* (Au).

CITHAREXYLUM BRACHYANTHUM (A. Gray) A. Gray

Additional bibliography: Mold., *Phytologia* 47: 224. 1980; Mold., *Phytol. Mem.* 2: 48, 60, 375, 381, & 530. 1980.

Recent collectors describe this as a "regular" shrub, 1--1.5 m. tall, and have found it growing in sandy soil in matorral of *Larrea* and *Yucca* and in matorral mediano subinermis parvifolius, at 1000 m. altitude.

Additional citations: MEXICO: Zacatecas: *González Gutierrez 73* (Me--276673); *Medrano & al. 7986* (Me--275990); *Medrano, Zavaleta, Ortiz, & Castellanos 7966* (Me--275460).

CITHAREXYLUM CAUDATUM L.

Additional & emended bibliography: Sandmark in L., *Amoen. Acad.* 5: 380. 1759; Loud., *Hort. Brit.*, ed. 1, 248 (1830) and ed. 2, 248. 1832; G. Don in Loud., *Hort. Brit.*, ed. 3, 248. 1839; G. Don in Sweet, *Hort. Brit.*, ed. 3, 551. 1839; Urb., *Symb. Antil.* 4: 535. 1911; Mold., *Phytologia* 47: 359. 1981.

The corollas are said to have been "white" and the fruit orange on *Duke & Idrobo 11562*.

The *Liogier, Liogier, & Martoreli 29890*, distributed as *C. caudatum*, seems better placed as *C. Xperkinsi* Mold., while *Hartley 13322* tends toward *C. caudatum* f. *parvifolium* Mold.

Additional citations: PUERTO RICO: *Hartley 13322* (W--2892409). COLOMBIA: Chocó: *Duke & Idrobo 11562* (N). CULTIVATED: Hawaiian Islands: *Herbst 619* (Ne--149144).

CITHAREXYLUM COOPERI Standl.

Additional bibliography: Mold., *Phytologia* 47: 359. 1981.

Breedlove encountered this plant in montane rainforests with scattered *Pinus* and *Liquidambar*, at 1250 m. altitude, in fruit in October. His collection has been misidentified and distributed in some herbaria as *C. crassifolium* Greenm.

Additional citations: MEXICO: Chiapas: *Breedlove 38060* (Me--269888).

CITHAREXYLUM COSTARICENSE Mold.

Additional bibliography: Mold., *Phytologia* 47: 359. 1981.

Recent collectors describe this plant as a tree, 20 feet tall, the flowers sweetly fragrant, and have found it growing at 4450--5800 feet altitude, in anthesis in February. The corollas are said to have been "white" on the collection cited below.

Additional citations: COSTA RICA: San Jose: *Almeda & Nakai* 3739 (N).

CITHAREXYLUM CRASSIFOLIUM Greenm.

Additional bibliography: Mold., *Phytologia* 47: 359--360. 1981.

The *Breedlove 38060*, distributed as *C. crassifolium*, actually seems to represent *C. cooperi* Standl. instead.

CITHAREXYLUM DENTATUM D. Don

Additional bibliography: Mold., *Phytologia* 47: 360. 1981.

Ellenberg refers to this plant as an "evergreen mountainbush" and encountered it at 3810 m. altitude.

Additional citations: PERU: Ayacucho: *Ellenberg 4958a* (Ld).

CITHAREXYLUM DONNELL-SMITHII Greenm.

Additional bibliography: Mold., *Phytologia* 47: 360. 1981.

Sauer describes this plant as a tree, to 6 m. tall, and found it growing in a living *Erythrina* fence around cafetal, at 1200 m. altitude, in fruit in April.

The *Dwyer & Coomes 12928*, distributed as *C. donnell-smithii*, actually is *C. hexangulare* Greenm.

Additional citations: COSTA RICA: San José: *Sauer 5798* (Ws)

CITHAREXYLUM EKMANI Mold.

Additional & emended bibliography: Alain in León & Alain, Fl. Cuba, imp. 1, 4: 299 & 301. 1957; Mold., *Phytologia* 31: 353. 1975; Mold., *Phytol. Mem.* 2: 88 & 531. 1980.

CITHAREXYLUM ELLIPTICUM Sessé & Moc.

Additional & emended bibliography: Alain in León & Alain, Fl. Cuba, imp. 1, 4: 298 & 299. 1957; Mold., *Phytologia* 41: 64, 66, & 114. 1978; Mold., *Phytol. Mem.* 2: 60, 70, 88, 347, & 531. 1980.

Recent collectors describe this species as a scarce shrub or tree, 2--3 m. tall, the corollas white, with an agreeable odor, and have encountered it in matorral and with *Coccoloba uvifera* on 10-meters-high sand dunes, at sealevel to 50 m. altitude, in anthesis in June, July, and October. The Breckons found it "a-long weedy roadsides on consolidated coastal dunes with dominant scattered shrubs varying in form and height with exposure but up to 3 m. tall, the flowers creamy-white, the majority of the plants sterile". The corollas are said to have been "white" also on *Magaña & Cowan 2113*.

Material of *C. ellipticum* has been misidentified and distributed in some herbaria as *C. hexangulare* Greenm. On the other hand, the *Boege 2991*, distributed as *C. ellipticum*, actually is *C. hexangulare* Greenm.

Additional citations: MEXICO: Tabasco: *Magaña & Cowan 2113* (N). Veracruz: *Breckon & Breckon 2017* (Ld); *Fay, Byrne, & Hernandez 810* (N, W--2878391); *Ventura A. 9119* (N).

CITHAREXYLUM ENDLICHII Mold.

Additional bibliography: Mold., *Phytologia* 31: 353. 1975; Mold., *Phytol. Mem.* 2: 60 & 531. 1980.

CITHAREXYLUM DOLIGNITICUM Berry

Additional bibliography: Mold., *Phytologia* 31: 353. 1975; Mold., *Phytol. Mem.* 2: 368 & 531. 1980.

CITHAREXYLUM FLABELLIFOLIUM S. Wats.

Additional bibliography: Mold., *Phytologia* 41: 64. 1978; Mold., *Phytol. Mem.* 2: 60, 70, & 531. 1980; Wiggins, *Fl. Baja Calif.* [527] & 529, fig. 496. 1980.

Illustrations: Wiggins, *Fl. Baja Calif.* [527], fig. 496. 1980.

Webster & Lynch describe this plant as a fairly common shrub, 1--2 m. tall, with gray, smooth bark, and "violet flowers". They have encountered it on silty flats at the base of lava boulders, at 100 m. altitude.

The Kishler 674, distributed as *C. flabellifolium*, actually is *C. racemosum* Sessé & Moc.

Additional citations: MEXICO: Sonora: Webster & Lynch 17012 (Me--268060). MOUNTED ILLUSTRATIONS: Wiggins, *Fl. Baja Calif.* fig. 496 (Z, Z).

CITHAREXYLUM FLEXUOSUM (Ruiz & Pav.) D. Don

Additional synonymy: *Citharexylon spinosum* Bonpl. ex Spreng. in L., *Syst. Veg.*, ed. 16, 2: 764. 1825.

Additional & emended bibliography: Spreng. in L., *Syst. Veg.*, ed. 16, 2: 764. 1825; D. Dietr., *Syn. Pl.* 3: 615. 1843; Fedde & Schust., *Justs Bot. Jahresber.* 40 (2): 334. 1915; Mold., *Phytologia* 41: 64--65. 1978; Mold., *Phytol. Mem.* 2: 132, 347, 381, 382, & 531. 1980.

CITHAREXYLUM FLEXUOSUM var. *GLABERRIMUM* Mold.

Additional bibliography: Mold., *Phytologia* 31: 355. 1975; Mold., *Phytol. Mem.* 2: 132 & 531. 1980.

CITHAREXYLUM FORSITHIAEFOLIUM Massalongo

Additional bibliography: Mold., *Phytologia* 31: 355--356. 1975; Mold., *Phytol. Mem.* 2: 368 & 531. 1980.

CITHAREXYLUM FRUTICOSUM L.

Additional & emended synonymy: *Citharexylum fruticosum* var. *fruticosum* [L.] apud Alain in Leon & Alain, *Fl. Cuba*, imp. 1, 4: 299. 1957. *Citharexylum fruticosum* var. *fruticosum* [Alain] apud Mold., *Phytologia* 6: 355, in syn. 1958. *Cytherexylum fruticosum* L. ex Mold., *Phytol. Mem.* 2: 396, in syn. 1980.

Additional bibliography: Sandmark in L., *Amoen. Acad.* 5: 380. 1759; D. Dietr., *Syn. Pl.* 3: 615. 1843; Urb., *Symb. Antill.* 4: 535. 1911; Firminger, *Man. Gard. India*, ed. 6, 2: 386. 1918; H. N. & A. L. Mold., *Pl. Life* 2: 51, 52, & 84. 1948; Alain in León & Alain, *Fl. Cuba*, imp. 1, 4: 299--300, fig. 129. 1957; Boquiren, *Mycologia* 63: 954. 1971; Pierre-Noel, *Nom. Polyglot. Pl. Hait.* 470. 1971; D. Powell, *Bull. Inst. Jam. Sci.* 15 (2): 419 & 422. 1973; Napp-Zinn, *Anat. Blatt. A* (1): 383. 1974; L. H. & E. Z. Bailey, *Hortus Thrid* 275. 1976; Little, *U. S. Dept. Agr. For. Serv. Conserv. Res. Rep.* 20: 19. 1976; Woodbury & Little, *U. S. Dept. Agr. For. Serv. Res. Paper ITF-19*: 9 & 23. 1976.

[to be continued]